

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.031
Model:            OLS  Adj. R-squared:    0.025
Method:          Least Squares  F-statistic:      4.949
Date:            Wed, 30 Aug 2023  Prob (F-statistic):    0.00766
Time:            12:14:07  Log-Likelihood:    -1033.7
No. Observations: 311  AIC:                2073.
Df Residuals:    308  BIC:                2085.
Df Model:         2
Covariance Type: nonrobust
=====
```

```
=====
               coef  std err      t  P>|t|  [0.025  0.975]
-----
const                4.1369    2.707    1.528  0.127   -1.189    9.463
# of past defaults          0.6149    0.347    1.772  0.077   -0.068    1.298
ln_GDP per capita (constant 2015 US$) -0.7557    0.335   -2.259  0.025   -1.414   -0.097
=====
```

```
=====
Omnibus:            173.745  Durbin-Watson:        2.036
Prob(Omnibus):      0.000  Jarque-Bera (JB):    11779.542
Skew:               1.418  Prob(JB):            0.00
Kurtosis:           33.016  Cond. No.             56.7
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 3.1523539068938797  
LM P-Value: 0.6765106243352512  
F Statistic: 0.6246388132601416  
F P-Value: 0.681098531658838

Regression Summary:

| OLS Regression Results                     |                  |                     |          |       |        |        |  |
|--|------------------|---------------------|----------|-------|--------|--------|--|
| =====                                      |                  |                     |          |       |        |        |  |
| Dep. Variable:                             | Cumulative_diff  | R-squared:          | 0.044    |       |        |        |  |
| Model:                                     | OLS              | Adj. R-squared:     | 0.036    |       |        |        |  |
| Method:                                    | Least Squares    | F-statistic:        | 5.098    |       |        |        |  |
| Date:                                      | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00685  |       |        |        |  |
| Time:                                      | 12:14:08         | Log-Likelihood:     | -666.54  |       |        |        |  |
| No. Observations:                          | 222              | AIC:                | 1339.    |       |        |        |  |
| Df Residuals:                              | 219              | BIC:                | 1349.    |       |        |        |  |
| Df Model:                                  | 2                |                     |          |       |        |        |  |
| Covariance Type:                           | nonrobust        |                     |          |       |        |        |  |
| =====                                      |                  |                     |          |       |        |        |  |
|  | coef             | std err             | t        | P> t  | [0.025 | 0.975] |  |
| -----                                      |                  |                     |          |       |        |        |  |
| const                                      | 6.1456           | 2.358               | 2.606    | 0.010 | 1.498  | 10.793 |  |
| Adjusted savings: gross savings (% of GNI) | -0.0091          | 0.029               | -0.315   | 0.753 | -0.066 | 0.048  |  |
| ln_GDP per capita (constant 2015 US\$)     | -0.9351          | 0.307               | -3.047   | 0.003 | -1.540 | -0.330 |  |
| =====                                      |                  |                     |          |       |        |        |  |
| Omnibus:                                   | 86.143           | Durbin-Watson:      | 1.845    |       |        |        |  |
| Prob(Omnibus):                             | 0.000            | Jarque-Bera (JB):   | 359.489  |       |        |        |  |
| Skew:                                      | -1.521           | Prob(JB):           | 8.67e-79 |       |        |        |  |
| Kurtosis:                                  | 8.441            | Cond. No.           | 164.     |       |        |        |  |
| =====                                      |                  |                     |          |       |        |        |  |

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 0.46096951581748025  
LM P-Value: 0.9934828164578944  
F Statistic: 0.0898888247357237  
F P-Value: 0.9937728399414107

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.044

Model:

OLS

Adj. R-squared:

0.035

Method:

Least Squares

F-statistic:

5.067

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.00706

Time:

12:14:08

Log-Likelihood:

-666.57

No. Observations:

222

AIC:

1339.

Df Residuals:

219

BIC:

1349.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

-----

const

6.1508

2.360

2.606

0.010

1.499

10.802

Adjusted savings: net national savings (% of GNI)

-0.0055

0.028

-0.199

0.842

-0.060

0.049

ln\_GDP per capita (constant 2015 US\$)

-0.9515

0.301

-3.161

0.002

-1.545

-0.358

=====

Omnibus:

86.307

Durbin-Watson:

1.847

Prob(Omnibus):

0.000

Jarque-Bera (JB):

361.607

Skew:

-1.523

Prob(JB):

3.01e-79

Kurtosis:

8.461

Cond. No.

109.

=====

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 0.4402288606803917  
LM P-Value: 0.9941487874402768  
F Statistic: 0.08583637130331638  
F P-Value: 0.9944105625586831

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.040
Model:            OLS  Adj. R-squared:    -0.027
Method:           Least Squares  F-statistic:      0.5976
Date:             Wed, 30 Aug 2023  Prob (F-statistic):    0.557
Time:             12:14:09  Log-Likelihood:    -83.948
No. Observations: 32  AIC:                173.9
Df Residuals:     29  BIC:                178.3
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
               coef  std err      t  P>|t|  [0.025  0.975]
-----
const                1.1360   5.236   0.217  0.830   -9.574   11.846
Banking Crisis Dummy    -2.1612   2.136  -1.012  0.320   -6.529   2.207
ln_GDP per capita (constant 2015 US$) -0.2940   0.571  -0.515  0.610   -1.461   0.873
=====
```

```
=====
Omnibus:            0.974  Durbin-Watson:        1.749
Prob(Omnibus):      0.615  Jarque-Bera (JB):        0.832
Skew:               -0.090  Prob(JB):              0.660
Kurtosis:           2.231  Cond. No.              78.3
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 6.944213763158565  
LM P-Value: 0.13886580472193433  
F Statistic: 1.87076320248928  
F P-Value: 0.14457094773989407

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.019
Model:            OLS  Adj. R-squared:    0.012
Method:           Least Squares  F-statistic:      2.663
Date:            Wed, 30 Aug 2023  Prob (F-statistic):    0.0715
Time:            12:14:09  Log-Likelihood:    -874.80
No. Observations: 273  AIC:                1756.
Df Residuals:     270  BIC:                1766.
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|   [0.025   0.975]
-----
const                5.4144    2.579    2.100   0.037    0.338   10.491
Broad money growth (annual %) -0.0073    0.016   -0.463   0.644   -0.038    0.024
ln_GDP per capita (constant 2015 US$) -0.7516    0.327   -2.296   0.022   -1.396   -0.107
=====
```

```
=====
Omnibus:            282.948  Durbin-Watson:        1.854
Prob(Omnibus):      0.000  Jarque-Bera (JB):    25510.654
Skew:               3.845  Prob(JB):            0.00
Kurtosis:           49.729  Cond. No.            214.
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 2.9668896872443278  
LM P-Value: 0.705090638500749  
F Statistic: 0.5867129001897166  
F P-Value: 0.7101749599737195

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.032
Model:            OLS  Adj. R-squared:    0.024
Method:           Least Squares  F-statistic:      2.610
Date:            Wed, 30 Aug 2023  Prob (F-statistic):    0.0755
Time:            12:14:10  Log-Likelihood:   -805.79
No. Observations: 251  AIC:              1618.
Df Residuals:     248  BIC:              1628.
Df Model:          2
Covariance Type:  HC3
=====
```

|  | coef    | std err | z      | P> z  | [0.025 | 0.975] |
|--|---------|---------|--------|-------|--------|--------|
| const                                  | 7.3862  | 3.592   | 2.056  | 0.040 | 0.346  | 14.426 |
| Broad money to total reserves ratio    | -0.0020 | 0.065   | -0.032 | 0.975 | -0.129 | 0.125  |
| ln_GDP per capita (constant 2015 US\$) | -0.9903 | 0.445   | -2.226 | 0.026 | -1.862 | -0.118 |

```
=====
Omnibus:          272.805  Durbin-Watson:        1.866
Prob(Omnibus):    0.000  Jarque-Bera (JB):    24129.303
Skew:             4.099  Prob(JB):            0.00
Kurtosis:         50.328  Cond. No.            100.
=====
```

### Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

## White Test Results:

LM Statistic: 9.310071806367802  
LM P-Value: 0.09731746003030801  
F Statistic: 1.8875156359289325  
F P-Value: 0.09707853752389863

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.112

Model:

OLS

Adj. R-squared:

0.081

Method:

Least Squares

F-statistic:

3.657

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0319

Time:

12:14:11

Log-Likelihood:

-162.48

No. Observations:

61

AIC:

331.0

Df Residuals:

58

BIC:

337.3

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

-----

const

7.9413

3.656

2.172

0.034

0.623

15.260

Central government debt, total (% of GDP)

0.0118

0.014

0.848

0.400

-0.016

0.040

ln\_GDP per capita (constant 2015 US\$)

-1.1864

0.443

-2.679

0.010

-2.073

-0.300

Omnibus:

2.857

Durbin-Watson:

2.000

Prob(Omnibus):

0.240

Jarque-Bera (JB):

2.153

Skew:

-0.447

Prob(JB):

0.341

Kurtosis:

3.219

Cond. No.

486.

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.956157504159223  
LM P-Value: 0.42125421500961724  
F Statistic: 0.9727693555237116  
F P-Value: 0.4426053332558282

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.031

Model:

OLS

Adj. R-squared:

0.024

Method:

Least Squares

F-statistic:

4.464

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0124

Time:

12:14:11

Log-Likelihood:

-898.05

No. Observations:

281

AIC:

1802.

Df Residuals:

278

BIC:

1813.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

6.2470

2.395

2.608

0.010

1.532

10.962

Claims on central government, etc. (% GDP)

0.0134

0.020

0.665

0.507

-0.026

0.053

ln\_GDP per capita (constant 2015 US\$)

-0.9015

0.307

-2.936

0.004

-1.506

-0.297

Omnibus:

286.108

Durbin-Watson:

1.848

Prob(Omnibus):

0.000

Jarque-Bera (JB):

25390.063

Skew:

3.760

Prob(JB):

0.00

Kurtosis:

48.956

Cond. No.

135.

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 7.334800472121218  
LM P-Value: 0.1969075443946164  
F Statistic: 1.4741151840373872  
F P-Value: 0.19838086690951873



Regression Summary:

| OLS Regression Results                                       |                  |                     |           |       |        |        |        |        |  |
|--|------------------|---------------------|-----------|-------|--------|--------|--------|--------|--|
| =====  |                  |                     |           |       |        |        |        |        |  |
| Dep. Variable:   | Cumulative_diff  | R-squared:          | 0.021     |       |        |        |        |        |  |
| Model:   | OLS              | Adj. R-squared:     | 0.014     |       |        |        |        |        |  |
| Method:  | Least Squares    | F-statistic:        | 2.887     |       |        |        |        |        |  |
| Date:  | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.0575    |       |        |        |        |        |  |
| Time:  | 12:14:11         | Log-Likelihood:     | -871.79   |       |        |        |        |        |  |
| No. Observations:  | 272              | AIC:                | 1750.     |       |        |        |        |        |  |
| Df Residuals:  | 269              | BIC:                | 1760.     |       |        |        |        |        |  |
| Df Model:  | 2                |                     |           |       |        |        |        |        |  |
| Covariance Type:   | nonrobust        |                     |           |       |        |        |        |        |  |
| =====  |                  |                     |           |       |        |        |        |        |  |
|  |                  | coef                | std err   | t     | P> t   | [0.025 | 0.975] |        |  |
| -----  |                  |                     |           |       |        |        |        |        |  |
| const  |                  | 5.0941              | 2.525     | 2.018 | 0.045  | 0.124  | 10.064 |        |  |
| Claims on private sector (annual growth as % of broad money) |                  | -0.0142             |           | 0.017 | -0.853 | 0.395  | -0.047 | 0.019  |  |
| ln_GDP per capita (constant 2015 US\$)                       |                  | -0.7019             |           | 0.328 | -2.139 | 0.033  | -1.348 | -0.056 |  |
| =====  |                  |                     |           |       |        |        |        |        |  |
| Omnibus:   | 283.878          | Durbin-Watson:      | 1.862     |       |        |        |        |        |  |
| Prob(Omnibus):   | 0.000            | Jarque-Bera (JB):   | 26109.065 |       |        |        |        |        |  |
| Skew:  | 3.880            | Prob(JB):           | 0.00      |       |        |        |        |        |  |
| Kurtosis:  | 50.366           | Cond. No.           | 182.      |       |        |        |        |        |  |
| =====  |                  |                     |           |       |        |        |        |        |  |

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.919235718447624  
LM P-Value: 0.42581616318791826  
F Statistic: 0.9798659252956559  
F P-Value: 0.43044630158803154

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.043
Model:            OLS  Adj. R-squared:    0.036
Method:           Least Squares  F-statistic:      6.033
Date:             Wed, 30 Aug 2023  Prob (F-statistic):    0.00273
Time:             12:14:12  Log-Likelihood:    -870.66
No. Observations: 272  AIC:                1747.
Df Residuals:     269  BIC:                1758.
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|   [0.025   0.975]
-----
const                7.2296    2.462    2.936   0.004    2.382   12.077
Consumer price index (2010 = 100)    0.0075    0.009    0.841   0.401   -0.010    0.025
ln_GDP per capita (constant 2015 US$) -1.0695    0.312   -3.433   0.001   -1.683   -0.456
=====
```

```
=====
Omnibus:            284.905  Durbin-Watson:        1.776
Prob(Omnibus):      0.000  Jarque-Bera (JB):    25360.358
Skew:               3.920  Prob(JB):            0.00
Kurtosis:           49.650  Cond. No.            528.
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 4.394041688880227  
LM P-Value: 0.4941842023215359  
F Statistic: 0.8735344284698418  
F P-Value: 0.49930347785996665

Regression Summary:

| OLS Regression Results                 |                  |                     |          |        |        |        |        |
|--|------------------|---------------------|----------|--------|--------|--------|--------|
| =====                                  |                  |                     |          |        |        |        |        |
| Dep. Variable:                         | Cumulative_diff  | R-squared:          | 0.047    |        |        |        |        |
| Model:                                 | OLS              | Adj. R-squared:     | 0.040    |        |        |        |        |
| Method:                                | Least Squares    | F-statistic:        | 6.655    |        |        |        |        |
| Date:                                  | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00151  |        |        |        |        |
| Time:                                  | 12:14:12         | Log-Likelihood:     | -802.37  |        |        |        |        |
| No. Observations:                      | 270              | AIC:                | 1611.    |        |        |        |        |
| Df Residuals:                          | 267              | BIC:                | 1622.    |        |        |        |        |
| Df Model:                              | 2                |                     |          |        |        |        |        |
| Covariance Type:                       | nonrobust        |                     |          |        |        |        |        |
| =====                                  |                  |                     |          |        |        |        |        |
|  | coef             | std err             | t        | P> t   | [0.025 | 0.975] |        |
| -----                                  |                  |                     |          |        |        |        |        |
| const                                  | 5.3660           | 1.989               | 2.698    | 0.007  | 1.450  | 9.282  |        |
| Current Account balance (% of GDP)     |                  | 0.0676              | 0.036    | 1.890  | 0.060  | -0.003 | 0.138  |
| ln_GDP per capita (constant 2015 US\$) |                  | -0.7631             | 0.252    | -3.024 | 0.003  | -1.260 | -0.266 |
| =====                                  |                  |                     |          |        |        |        |        |
| Omnibus:                               | 87.744           | Durbin-Watson:      | 1.903    |        |        |        |        |
| Prob(Omnibus):                         | 0.000            | Jarque-Bera (JB):   | 387.098  |        |        |        |        |
| Skew:                                  | -1.270           | Prob(JB):           | 8.76e-85 |        |        |        |        |
| Kurtosis:                              | 8.287            | Cond. No.           | 83.3     |        |        |        |        |
| =====                                  |                  |                     |          |        |        |        |        |

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 6.268738006095801  
LM P-Value: 0.2809408075764164  
F Statistic: 1.255025150296779  
F P-Value: 0.28385449052046896

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.092

Model:

OLS

Adj. R-squared:

0.059

Method:

Least Squares

F-statistic:

2.751

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0728

Time:

12:14:13

Log-Likelihood:

-161.96

No. Observations:

57

AIC:

329.9

Df Residuals:

54

BIC:

336.0

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

7.2165

6.270

1.151

0.255

-5.354

19.787

Cyclically adjusted balance (% of potential GDP)

0.2336

0.133

1.762

0.084

-0.032

0.499

ln\_GDP per capita (constant 2015 US\$)

-0.9376

0.706

-1.328

0.190

-2.353

0.478

Omnibus:

1.562

Durbin-Watson:

1.862

Prob(Omnibus):

0.458

Jarque-Bera (JB):

0.817

Skew:

-0.150

Prob(JB):

0.665

Kurtosis:

3.504

Cond. No.

111.

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.393837270032533  
LM P-Value: 0.6395086906561832  
F Statistic: 0.6457679190489756  
F P-Value: 0.6659050433283142

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.203

Model:

OLS

Adj. R-squared:

0.173

Method:

Least Squares

F-statistic:

6.756

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.00244

Time:

12:14:13

Log-Likelihood:

-155.17

No. Observations:

56

AIC:

316.3

Df Residuals:

53

BIC:

322.4

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

7.9947

5.891

1.357

0.181

-3.822

19.811

Cyclically adjusted primary balance (% of potential GDP)

0.4161

0.130

3.190

0.002

0.154

0.678

ln\_GDP per capita (constant 2015 US\$)

-1.0362

0.660

-1.570

0.122

-2.360

0.287

Omnibus:

3.700

Durbin-Watson:

1.741

Prob(Omnibus):

0.157

Jarque-Bera (JB):

3.515

Skew:

-0.156

Prob(JB):

0.172

Kurtosis:

4.187

Cond. No.

102.

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 2.8051810534360238  
LM P-Value: 0.7299903795484757  
F Statistic: 0.5273410285039077  
F P-Value: 0.7544531700107249

Regression Summary:

| OLS Regression Results                                      |                  |                     |          |       |        |        |        |       |  |
|---|------------------|---------------------|----------|-------|--------|--------|--------|-------|--|
| =====   |                  |                     |          |       |        |        |        |       |  |
| Dep. Variable:  | Cumulative_diff  | R-squared:          | 0.009    |       |        |        |        |       |  |
| Model:  | OLS              | Adj. R-squared:     | 0.000    |       |        |        |        |       |  |
| Method:   | Least Squares    | F-statistic:        | 1.039    |       |        |        |        |       |  |
| Date:   | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.355    |       |        |        |        |       |  |
| Time:   | 12:14:14         | Log-Likelihood:     | -703.55  |       |        |        |        |       |  |
| No. Observations:   | 242              | AIC:                | 1413.    |       |        |        |        |       |  |
| Df Residuals:   | 239              | BIC:                | 1424.    |       |        |        |        |       |  |
| Df Model:   | 2                |                     |          |       |        |        |        |       |  |
| Covariance Type:  | nonrobust        |                     |          |       |        |        |        |       |  |
| =====   |                  |                     |          |       |        |        |        |       |  |
|   |                  | coef                | std err  | t     | P> t   | [0.025 | 0.975] |       |  |
| -----   |                  |                     |          |       |        |        |        |       |  |
| const   |                  | 3.5223              | 2.820    | 1.249 | 0.213  | -2.033 | 9.078  |       |  |
| ln_Debt service on external debt, total (TDS, current US\$) |                  | -0.1103             |          | 0.138 | -0.798 | 0.426  | -0.383 | 0.162 |  |
| ln_GDP per capita (constant 2015 US\$)                      |                  | -0.2603             |          | 0.320 | -0.814 | 0.417  | -0.891 | 0.370 |  |
| =====   |                  |                     |          |       |        |        |        |       |  |
| Omnibus:  | 86.124           | Durbin-Watson:      | 2.013    |       |        |        |        |       |  |
| Prob(Omnibus):  | 0.000            | Jarque-Bera (JB):   | 407.500  |       |        |        |        |       |  |
| Skew:   | -1.352           | Prob(JB):           | 3.26e-89 |       |        |        |        |       |  |
| Kurtosis:   | 8.754            | Cond. No.           | 203.     |       |        |        |        |       |  |
| =====   |                  |                     |          |       |        |        |        |       |  |

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 8.298512013050216  
LM P-Value: 0.14053331568949184  
F Statistic: 1.6760259867829472  
F P-Value: 0.14112005276793585

Regression Summary:

| OLS Regression Results                       |                  |                     |           |       |        |        |  |
|--|------------------|---------------------|-----------|-------|--------|--------|--|
| =====  |                  |                     |           |       |        |        |  |
| Dep. Variable:                               | Cumulative_diff  | R-squared:          | 0.039     |       |        |        |  |
| Model:                                       | OLS              | Adj. R-squared:     | 0.031     |       |        |        |  |
| Method:                                      | Least Squares    | F-statistic:        | 5.475     |       |        |        |  |
| Date:  | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00474   |       |        |        |  |
| Time:  | 12:14:14         | Log-Likelihood:     | -768.77   |       |        |        |  |
| No. Observations:                            | 239              | AIC:                | 1544.     |       |        |        |  |
| Df Residuals:                                | 236              | BIC:                | 1554.     |       |        |        |  |
| Df Model:                                    | 2                |                     |           |       |        |        |  |
| Covariance Type:                             | HC3              |                     |           |       |        |        |  |
| =====  |                  |                     |           |       |        |        |  |
|  | coef             | std err             | z         | P> z  | [0.025 | 0.975] |  |
| -----  |                  |                     |           |       |        |        |  |
| const  | 5.6553           | 4.401               | 1.285     | 0.199 | -2.970 | 14.280 |  |
| Domestic credit to private sector (% of GDP) | -0.0135          | 0.017               | -0.780    | 0.435 | -0.047 | 0.020  |  |
| ln_GDP per capita (constant 2015 US\$)       | -0.7371          | 0.597               | -1.235    | 0.217 | -1.907 | 0.433  |  |
| =====  |                  |                     |           |       |        |        |  |
| Omnibus:                                     | 274.550          | Durbin-Watson:      | 1.892     |       |        |        |  |
| Prob(Omnibus):                               | 0.000            | Jarque-Bera (JB):   | 25816.373 |       |        |        |  |
| Skew:  | 4.439            | Prob(JB):           | 0.00      |       |        |        |  |
| Kurtosis:                                    | 53.136           | Cond. No.           | 351.      |       |        |        |  |
| =====  |                  |                     |           |       |        |        |  |

Notes:  
[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 11.328443665154253  
LM P-Value: 0.04524307206888292  
F Statistic: 2.31871509684669  
F P-Value: 0.04422914443705495

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.031
Model:            OLS  Adj. R-squared:    0.025
Method:           Least Squares  F-statistic:      4.970
Date:            Wed, 30 Aug 2023  Prob (F-statistic):    0.00751
Time:            12:14:15  Log-Likelihood:    -1033.7
No. Observations: 311  AIC:                2073.
Df Residuals:     308  BIC:                2085.
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|   [0.025   0.975]
-----
const                4.0776    2.715    1.502    0.134   -1.265    9.420
Dummy for past default      1.4276    0.801    1.783    0.076   -0.148    3.003
ln_GDP per capita (constant 2015 US$) -0.7757    0.333   -2.331    0.020   -1.431   -0.121
=====
```

```
=====
Omnibus:            172.163  Durbin-Watson:        2.041
Prob(Omnibus):      0.000  Jarque-Bera (JB):    11707.705
Skew:               1.394  Prob(JB):           0.00
Kurtosis:           32.929  Cond. No.           56.7
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 2.582451733199741  
LM P-Value: 0.6299348489326175  
F Statistic: 0.6405522600772416  
F P-Value: 0.6339498581496477



Regression Summary:

| OLS Regression Results                   |                  |                     |          |        |        |        |        |
|--|------------------|---------------------|----------|--------|--------|--------|--------|
| =====                                    |                  |                     |          |        |        |        |        |
| Dep. Variable:                           | Cumulative_diff  | R-squared:          | 0.025    |        |        |        |        |
| Model:                                   | OLS              | Adj. R-squared:     | 0.018    |        |        |        |        |
| Method:                                  | Least Squares    | F-statistic:        | 3.360    |        |        |        |        |
| Date:                                    | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.0363   |        |        |        |        |
| Time:                                    | 12:14:15         | Log-Likelihood:     | -846.74  |        |        |        |        |
| No. Observations:                        | 265              | AIC:                | 1699.    |        |        |        |        |
| Df Residuals:                            | 262              | BIC:                | 1710.    |        |        |        |        |
| Df Model:                                | 2                |                     |          |        |        |        |        |
| Covariance Type:                         | nonrobust        |                     |          |        |        |        |        |
| =====                                    |                  |                     |          |        |        |        |        |
|  | coef             | std err             | t        | P> t   | [0.025 | 0.975] |        |
| -----                                    |                  |                     |          |        |        |        |        |
| const                                    | 5.3723           | 2.601               | 2.066    | 0.040  | 0.252  | 10.493 |        |
| Exports of goods and services (% of GDP) |                  | 0.0070              | 0.021    | 0.333  | 0.739  | -0.034 | 0.049  |
| ln_GDP per capita (constant 2015 US\$)   |                  | -0.8893             | 0.359    | -2.474 | 0.014  | -1.597 | -0.182 |
| =====                                    |                  |                     |          |        |        |        |        |
| Omnibus:                                 | 159.430          | Durbin-Watson:      | 1.898    |        |        |        |        |
| Prob(Omnibus):                           | 0.000            | Jarque-Bera (JB):   | 1759.590 |        |        |        |        |
| Skew:                                    | -2.202           | Prob(JB):           | 0.00     |        |        |        |        |
| Kurtosis:                                | 14.831           | Cond. No.           | 269.     |        |        |        |        |
| =====                                    |                  |                     |          |        |        |        |        |

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 2.292433190928879  
LM P-Value: 0.8073775870801867  
F Statistic: 0.45201606003384864  
F P-Value: 0.8116460875141029

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.087

Model:

OLS

Adj. R-squared:

0.078

Method:

Least Squares

F-statistic:

9.173

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.000151

Time:

12:14:16

Log-Likelihood:

-639.56

No. Observations:

216

AIC:

1285.

Df Residuals:

213

BIC:

1295.

Df Model:

2

Covariance Type:

HC3

coef

std err

z

P>|z|

[0.025

0.975]

const

3.5545

2.189

1.624

0.104

-0.736

7.845

Exports of goods and services (annual % growth)

0.0522

0.019

2.754

0.006

0.015

0.089

ln\_GDP per capita (constant 2015 US\$)

-0.6615

0.276

-2.396

0.017

-1.203

-0.120

Omnibus:

60.244

Durbin-Watson:

1.964

Prob(Omnibus):

0.000

Jarque-Bera (JB):

182.626

Skew:

-1.157

Prob(JB):

2.20e-40

Kurtosis:

6.864

Cond. No.

162.

Notes:  
[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 14.321761488782364  
LM P-Value: 0.01368969136649356  
F Statistic: 2.9825428215221272  
F P-Value: 0.012679550414601753

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.025

Model:

OLS

Adj. R-squared:

0.017

Method:

Least Squares

F-statistic:

3.347

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0367

Time:

12:14:16

Log-Likelihood:

-846.75

No. Observations:

265

AIC:

1700.

Df Residuals:

262

BIC:

1710.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

-----

const

4.9426

2.704

1.828

0.069

-0.381

10.266

External balance on goods and services (% of GDP)

-0.0072

0.025

-0.295

0.769

-0.055

0.041

ln\_GDP per capita (constant 2015 US\$)

-0.8147

0.337

-2.419

0.016

-1.478

-0.152

=====

Omnibus:

159.122

Durbin-Watson:

1.896

Prob(Omnibus):

0.000

Jarque-Bera (JB):

1755.397

Skew:

-2.196

Prob(JB):

0.00

Kurtosis:

14.819

Cond. No.

142.

=====

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 2.8357968847711765  
LM P-Value: 0.7252832419118882  
F Statistic: 0.5603140203187196  
F P-Value: 0.7303848519284428

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.018

Model:

OLS

Adj. R-squared:

0.010

Method:

Least Squares

F-statistic:

1.506

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.224

Time:

12:14:16

Log-Likelihood:

-713.04

No. Observations:

242

AIC:

1432.

Df Residuals:

239

BIC:

1443.

Df Model:

2

Covariance Type:

HC3

coef

std err

z

P>|z|

[0.025

0.975]

const

2.8987

2.036

1.424

0.154

-1.091

6.889

External debt stocks (% of GNI)

-0.0095

0.009

-1.029

0.304

-0.028

0.009

ln\_GDP per capita (constant 2015 US\$)

-0.3894

0.247

-1.577

0.115

-0.873

0.094

Omnibus:

91.782

Durbin-Watson:

1.994

Prob(Omnibus):

0.000

Jarque-Bera (JB):

426.568

Skew:

-1.464

Prob(JB):

2.35e-93

Kurtosis:

8.808

Cond. No.

705.

Notes:  
[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 12.358392128959515  
LM P-Value: 0.030193654817357654  
F Statistic: 2.5401150684089524  
F P-Value: 0.029130783256975695

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.019
Model:            OLS  Adj. R-squared:    0.011
Method:           Least Squares  F-statistic:      2.314
Date:             Wed, 30 Aug 2023  Prob (F-statistic):    0.101
Time:             12:14:17  Log-Likelihood:   -767.18
No. Observations: 240  AIC:                1540.
Df Residuals:     237  BIC:                1551.
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|   [0.025   0.975]
-----
const                2.3830    3.283    0.726    0.469   -4.085    8.851
Food Price Index         0.0205    0.025    0.824    0.411   -0.029    0.070
ln_GDP per capita (constant 2015 US$) -0.7114    0.343   -2.075    0.039   -1.387   -0.036
=====
```

```
=====
Omnibus:            158.536  Durbin-Watson:        1.900
Prob(Omnibus):      0.000  Jarque-Bera (JB):    1731.697
Skew:               -2.459  Prob(JB):            0.00
Kurtosis:           15.206  Cond. No.            781.
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 4.653861608370251  
LM P-Value: 0.4595647934074121  
F Statistic: 0.9254484682017345  
F P-Value: 0.4651264392162383

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.030
Model:            OLS  Adj. R-squared:    0.021
Method:           Least Squares  F-statistic:      3.538
Date:             Wed, 30 Aug 2023  Prob (F-statistic):    0.0307
Time:             12:14:17  Log-Likelihood:    -737.86
No. Observations: 233  AIC:                1482.
Df Residuals:     230  BIC:                1492.
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
              coef  std err      t  P>|t|  [0.025  0.975]
-----
const              3.9931    2.623    1.522  0.129   -1.175    9.162
Food Price Index (% change) -6.2425    3.790   -1.647  0.101  -13.710    1.225
ln_GDP per capita (constant 2015 US$) -0.6508    0.333   -1.952  0.052   -1.308    0.006
=====
```

```
=====
Omnibus:           166.721  Durbin-Watson:           1.956
Prob(Omnibus):     0.000  Jarque-Bera (JB):       2267.480
Skew:              -2.634  Prob(JB):                0.00
Kurtosis:          17.346  Cond. No.                79.6
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 2.5105473317571025  
LM P-Value: 0.7749057909998969  
F Statistic: 0.49450787245275574  
F P-Value: 0.7802005740861113

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.038

Model:

OLS

Adj. R-squared:

0.031

Method:

Least Squares

F-statistic:

5.818

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.00332

Time:

12:14:18

Log-Likelihood:

-965.44

No. Observations:

299

AIC:

1937.

Df Residuals:

296

BIC:

1948.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

5.8917

2.420

2.435

0.015

1.129

10.654

Foreign direct investment, net inflows (% of GDP)

-0.0533

0.035

-1.529

0.127

-0.122

0.015

ln\_GDP per capita (constant 2015 US\$)

-0.8190

0.313

-2.616

0.009

-1.435

-0.203

Omnibus:

272.416

Durbin-Watson:

1.902

Prob(Omnibus):

0.000

Jarque-Bera (JB):

20208.618

Skew:

3.211

Prob(JB):

0.00

Kurtosis:

42.760

Cond. No.

83.3

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 7.851088396625402  
LM P-Value: 0.164635643213906  
F Statistic: 1.5802009271083817  
F P-Value: 0.16550289416086847

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.033
Model:            OLS  Adj. R-squared:    0.027
Method:           Least Squares  F-statistic:      2.976
Date:             Wed, 30 Aug 2023  Prob (F-statistic):    0.0525
Time:             12:14:18  Log-Likelihood:    -1033.4
No. Observations: 311  AIC:                2073.
Df Residuals:     308  BIC:                2084.
Df Model:          2
Covariance Type:  HC3
=====
```

|  | coef    | std err | z      | P> z  | [0.025 | 0.975] |
|--|---------|---------|--------|-------|--------|--------|
| const                                  | 13.7855 | 7.436   | 1.854  | 0.064 | -0.788 | 28.360 |
| ln_GDP (constant 2015 US\$)            | -0.4113 | 0.260   | -1.581 | 0.114 | -0.921 | 0.099  |
| ln_GDP per capita (constant 2015 US\$) | -0.6904 | 0.293   | -2.353 | 0.019 | -1.266 | -0.115 |

```
=====
Omnibus:          160.004  Durbin-Watson:        2.052
Prob(Omnibus):    0.000  Jarque-Bera (JB):    10951.799
Skew:             1.214  Prob(JB):            0.00
Kurtosis:         31.970  Cond. No.            315.
=====
```

### Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

## White Test Results:

LM Statistic: 17.901272434666787  
LM P-Value: 0.003072716888496267  
F Statistic: 3.725630703296955  
F P-Value: 0.002741008290015174



## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:      Cumulative_diff  R-squared:      0.103
Model:              OLS  Adj. R-squared:    0.097
Method:             Least Squares  F-statistic:    7.542
Date:               Wed, 30 Aug 2023  Prob (F-statistic): 0.000635
Time:               12:14:19  Log-Likelihood: -1015.7
No. Observations:   309  AIC:              2037.
Df Residuals:       306  BIC:              2049.
Df Model:           2
Covariance Type:    HC3
=====
```

```
=====
               coef  std err      z    P>|z|    [0.025    0.975]
-----
const                2.9222    3.635    0.804    0.421    -4.203    10.047
GDP growth (annual %)      0.3251    0.157    2.071    0.038    0.017    0.633
ln_GDP per capita (constant 2015 US$) -0.6666    0.395   -1.687    0.092   -1.441    0.108
=====
```

```
=====
Omnibus:            244.770  Durbin-Watson:      1.758
Prob(Omnibus):      0.000  Jarque-Bera (JB):    18306.140
Skew:               2.544  Prob(JB):          0.00
Kurtosis:           40.362  Cond. No.          64.6
=====
```

### Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

## White Test Results:

LM Statistic: 13.870071940890014  
LM P-Value: 0.01645614416594992  
F Statistic: 2.847987546182001  
F P-Value: 0.015711724749923356

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.023
Model:            OLS  Adj. R-squared:    0.016
Method:           Least Squares  F-statistic:      3.558
Date:             Wed, 30 Aug 2023  Prob (F-statistic):    0.0297
Time:             12:14:19  Log-Likelihood:    -1035.1
No. Observations: 311  AIC:                2076.
Df Residuals:     308  BIC:                2087.
Df Model:         2
Covariance Type:  nonrobust
=====
```

```
=====
               coef  std err      t  P>|t|   [0.025   0.975]
-----
const                4.7221    2.929    1.612  0.108   -1.042   10.486
GDP growth China (annual %)      0.0956    0.148    0.644  0.520   -0.196    0.388
ln_GDP per capita (constant 2015 US$) -0.8632    0.331   -2.606  0.010   -1.515   -0.211
=====
```

```
=====
Omnibus:            173.383  Durbin-Watson:        2.027
Prob(Omnibus):      0.000  Jarque-Bera (JB):    12130.394
Skew:               1.403  Prob(JB):            0.00
Kurtosis:           33.467  Cond. No.            97.0
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 2.669050295290357  
LM P-Value: 0.7508478343293319  
F Statistic: 0.5280432216377795  
F P-Value: 0.7550122113655098

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.039
Model:            OLS  Adj. R-squared:    0.033
Method:           Least Squares  F-statistic:      6.310
Date:             Wed, 30 Aug 2023  Prob (F-statistic):    0.00206
Time:             12:14:19  Log-Likelihood:    -1032.4
No. Observations: 311  AIC:                2071.
Df Residuals:     308  BIC:                2082.
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
               coef  std err      t  P>|t|  [0.025  0.975]
-----
const                3.9503    2.656    1.487  0.138   -1.276    9.176
GDP growth USA (annual %)  0.4428    0.184    2.409  0.017    0.081    0.805
ln_GDP per capita (constant 2015 US$) -0.7755    0.330   -2.350  0.019   -1.425   -0.126
=====
```

```
=====
Omnibus:            174.137  Durbin-Watson:        2.059
Prob(Omnibus):      0.000  Jarque-Bera (JB):    12191.665
Skew:               1.414  Prob(JB):            0.00
Kurtosis:           33.542  Cond. No.            57.7
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 2.6712275937243133  
LM P-Value: 0.7505154088983675  
F Statistic: 0.5284777088609693  
F P-Value: 0.7546823471676268

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.023

Model:

OLS

Adj. R-squared:

0.015

Method:

Least Squares

F-statistic:

2.976

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0528

Time:

12:14:20

Log-Likelihood:

-806.01

No. Observations:

253

AIC:

1618.

Df Residuals:

250

BIC:

1629.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

4.3114

2.566

1.680

0.094

-0.742

9.365

General government final consumption expenditure (% of GDP)

0.0465

0.063

0.742

0.459

-0.077

0.170

ln\_GDP per capita (constant 2015 US\$)

-0.8303

0.340

-2.439

0.015

-1.501

-0.160

Omnibus:

158.971

Durbin-Watson:

1.894

Prob(Omnibus):

0.000

Jarque-Bera (JB):

1844.983

Skew:

-2.293

Prob(JB):

0.00

Kurtosis:

15.409

Cond. No.

125.

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 1.998457603820118  
LM P-Value: 0.849358414983628  
F Statistic: 0.39331951782546454  
F P-Value: 0.853188375403807

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.032

Model:

OLS

Adj. R-squared:

0.022

Method:

Least Squares

F-statistic:

3.248

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0410

Time:

12:14:20

Log-Likelihood:

-578.16

No. Observations:

198

AIC:

1162.

Df Residuals:

195

BIC:

1172.

Df Model:

2

Covariance Type:

HC3

coef

std err

z

P>|z|

[0.025

0.975]

const

4.4926

2.397

1.874

0.061

-0.205

9.190

General government final consumption expenditure (annual % growth)

0.0045

0.062

0.072

0.943

-0.118

0.127

ln\_GDP per capita (constant 2015 US\$)

-0.6976

0.295

-2.366

0.018

-1.276

-0.120

Omnibus:

74.905

Durbin-Watson:

1.855

Prob(Omnibus):

0.000

Jarque-Bera (JB):

360.856

Skew:

-1.379

Prob(JB):

4.38e-79

Kurtosis:

9.011

Cond. No.

81.0

Notes:  
[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 13.50287540333654  
LM P-Value: 0.01909549421167642  
F Statistic: 2.8103983551053155  
F P-Value: 0.017872036540072314

Regression Summary:

| OLS Regression Results                 |                  |                     |          |        |        |        |        |
|--|------------------|---------------------|----------|--------|--------|--------|--------|
| =====                                  |                  |                     |          |        |        |        |        |
| Dep. Variable:                         | Cumulative_diff  | R-squared:          | 0.101    |        |        |        |        |
| Model:                                 | OLS              | Adj. R-squared:     | 0.090    |        |        |        |        |
| Method:                                | Least Squares    | F-statistic:        | 9.240    |        |        |        |        |
| Date:                                  | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.000158 |        |        |        |        |
| Time:                                  | 12:14:21         | Log-Likelihood:     | -483.36  |        |        |        |        |
| No. Observations:                      | 167              | AIC:                | 972.7    |        |        |        |        |
| Df Residuals:                          | 164              | BIC:                | 982.1    |        |        |        |        |
| Df Model:                              | 2                |                     |          |        |        |        |        |
| Covariance Type:                       | nonrobust        |                     |          |        |        |        |        |
| =====                                  |                  |                     |          |        |        |        |        |
|  | coef             | std err             | t        | P> t   | [0.025 | 0.975] |        |
| -----                                  |                  |                     |          |        |        |        |        |
| const                                  | -0.0175          | 3.529               | -0.005   | 0.996  | -6.985 | 6.950  |        |
| Government Effectiveness               |                  | -1.8843             | 0.723    | -2.607 | 0.010  | -3.312 | -0.457 |
| ln_GDP per capita (constant 2015 US\$) |                  | -0.1929             | 0.419    | -0.460 | 0.646  | -1.021 | 0.635  |
| =====                                  |                  |                     |          |        |        |        |        |
| Omnibus:                               | 46.388           | Durbin-Watson:      | 1.772    |        |        |        |        |
| Prob(Omnibus):                         | 0.000            | Jarque-Bera (JB):   | 200.596  |        |        |        |        |
| Skew:                                  | -0.942           | Prob(JB):           | 2.76e-44 |        |        |        |        |
| Kurtosis:                              | 8.028            | Cond. No.           | 83.7     |        |        |        |        |
| =====                                  |                  |                     |          |        |        |        |        |

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.80976565458688  
LM P-Value: 0.5771172144600298  
F Statistic: 0.7517266861572183  
F P-Value: 0.5859624688583049

Regression Summary:

| OLS Regression Results                 |                  |                     |          |       |        |        |  |
|--|------------------|---------------------|----------|-------|--------|--------|--|
| =====                                  |                  |                     |          |       |        |        |  |
| Dep. Variable:                         | Cumulative_diff  | R-squared:          | 0.055    |       |        |        |  |
| Model:                                 | OLS              | Adj. R-squared:     | 0.048    |       |        |        |  |
| Method:                                | Least Squares    | F-statistic:        | 7.521    |       |        |        |  |
| Date:                                  | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.000669 |       |        |        |  |
| Time:                                  | 12:14:21         | Log-Likelihood:     | -828.65  |       |        |        |  |
| No. Observations:                      | 261              | AIC:                | 1663.    |       |        |        |  |
| Df Residuals:                          | 258              | BIC:                | 1674.    |       |        |        |  |
| Df Model:                              | 2                |                     |          |       |        |        |  |
| Covariance Type:                       | nonrobust        |                     |          |       |        |        |  |
| =====                                  |                  |                     |          |       |        |        |  |
|  | coef             | std err             | t        | P> t  | [0.025 | 0.975] |  |
| -----                                  |                  |                     |          |       |        |        |  |
| const                                  | 5.8044           | 2.515               | 2.308    | 0.022 | 0.853  | 10.756 |  |
| Gross capital formation (% of GDP)     | -0.1029          | 0.036               | -2.851   | 0.005 | -0.174 | -0.032 |  |
| ln_GDP per capita (constant 2015 US\$) | -0.6078          | 0.331               | -1.838   | 0.067 | -1.259 | 0.044  |  |
| =====                                  |                  |                     |          |       |        |        |  |
| Omnibus:                               | 159.657          | Durbin-Watson:      | 1.931    |       |        |        |  |
| Prob(Omnibus):                         | 0.000            | Jarque-Bera (JB):   | 1854.877 |       |        |        |  |
| Skew:                                  | -2.224           | Prob(JB):           | 0.00     |       |        |        |  |
| Kurtosis:                              | 15.279           | Cond. No.           | 189.     |       |        |        |  |
| =====                                  |                  |                     |          |       |        |        |  |

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 2.5015466085537414  
LM P-Value: 0.7762621308007313  
F Statistic: 0.49353826052896266  
F P-Value: 0.780971789070129

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.067
Model:            OLS  Adj. R-squared:    0.057
Method:           Least Squares  F-statistic:      6.457
Date:            Wed, 30 Aug 2023  Prob (F-statistic):    0.00196
Time:            12:14:22  Log-Likelihood:   -517.39
No. Observations: 182  AIC:                1041.
Df Residuals:     179  BIC:                1050.
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|   [0.025   0.975]
-----
const                6.6380    2.133    3.111   0.002    2.428   10.848
Gross debt (% of GDP) -0.0091    0.006   -1.559   0.121   -0.021    0.002
ln_GDP per capita (constant 2015 US$) -0.8650    0.262   -3.301   0.001   -1.382   -0.348
=====
```

```
=====
Omnibus:            12.995  Durbin-Watson:        1.987
Prob(Omnibus):      0.002  Jarque-Bera (JB):    27.260
Skew:               -0.269  Prob(JB):            1.20e-06
Kurtosis:           4.818  Cond. No.            547.
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 6.4130744148447665  
LM P-Value: 0.2680733273820706  
F Statistic: 1.285632279568887  
F P-Value: 0.2721255332708076



## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:      Cumulative_diff  R-squared:      0.023
Model:              OLS  Adj. R-squared:    0.015
Method:             Least Squares  F-statistic:    2.921
Date:               Wed, 30 Aug 2023  Prob (F-statistic): 0.0557
Time:               12:14:22  Log-Likelihood: -817.99
No. Observations:   256  AIC:              1642.
Df Residuals:       253  BIC:              1653.
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t  P>|t|  [0.025  0.975]
-----
const              3.9150    2.660    1.472  0.142  -1.323    9.153
Gross domestic savings (% of GDP)  -0.0186    0.024  -0.765  0.445  -0.066    0.029
ln_GDP per capita (constant 2015 US$) -0.6574    0.354  -1.858  0.064  -1.354    0.039
=====
```

```
=====
Omnibus:           155.318  Durbin-Watson:      1.906
Prob(Omnibus):     0.000  Jarque-Bera (JB):    1708.909
Skew:              -2.212  Prob(JB):             0.00
Kurtosis:          14.859  Cond. No.             165.
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 2.8214514203160093  
LM P-Value: 0.7274894052725809  
F Statistic: 0.5572058604775538  
F P-Value: 0.7327542626023453

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.027
Model:            OLS  Adj. R-squared:    0.020
Method:           Least Squares  F-statistic:      3.532
Date:            Wed, 30 Aug 2023  Prob (F-statistic):    0.0307
Time:            12:14:22  Log-Likelihood:   -811.10
No. Observations: 254  AIC:                1628.
Df Residuals:     251  BIC:                1639.
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|   [0.025   0.975]
-----
const                8.8866   4.377    2.030   0.043    0.267   17.506
Gross national expenditure (% of GDP) -0.0322   0.027   -1.194   0.234   -0.085    0.021
ln_GDP per capita (constant 2015 US$) -0.8794   0.341   -2.580   0.010   -1.551   -0.208
=====
```

```
=====
Omnibus:            159.097  Durbin-Watson:        1.958
Prob(Omnibus):      0.000  Jarque-Bera (JB):    1845.323
Skew:               -2.286  Prob(JB):            0.00
Kurtosis:           15.388  Cond. No.            1.30e+03
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

[2] The condition number is large, 1.3e+03. This might indicate that there are strong multicollinearity or other numerical problems.

### White Test Results:

LM Statistic: 2.787880629183567  
LM P-Value: 0.7326481348691041  
F Statistic: 0.5504466884553075  
F P-Value: 0.7379130190122785

Regression Summary:

| OLS Regression Results                   |                  |                     |          |        |        |        |        |
|--|------------------|---------------------|----------|--------|--------|--------|--------|
| =====                                    |                  |                     |          |        |        |        |        |
| Dep. Variable:                           | Cumulative_diff  | R-squared:          | 0.025    |        |        |        |        |
| Model:                                   | OLS              | Adj. R-squared:     | 0.018    |        |        |        |        |
| Method:                                  | Least Squares    | F-statistic:        | 3.423    |        |        |        |        |
| Date:                                    | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.0341   |        |        |        |        |
| Time:                                    | 12:14:23         | Log-Likelihood:     | -846.68  |        |        |        |        |
| No. Observations:                        | 265              | AIC:                | 1699.    |        |        |        |        |
| Df Residuals:                            | 262              | BIC:                | 1710.    |        |        |        |        |
| Df Model:                                | 2                |                     |          |        |        |        |        |
| Covariance Type:                         | nonrobust        |                     |          |        |        |        |        |
| =====                                    |                  |                     |          |        |        |        |        |
|  | coef             | std err             | t        | P> t   | [0.025 | 0.975] |        |
| -----                                    |                  |                     |          |        |        |        |        |
| const                                    | 5.0991           | 2.561               | 1.991    | 0.048  | 0.057  | 10.142 |        |
| Imports of goods and services (% of GDP) |                  | 0.0084              | 0.017    | 0.484  | 0.629  | -0.026 | 0.043  |
| ln_GDP per capita (constant 2015 US\$)   |                  | -0.8707             | 0.333    | -2.616 | 0.009  | -1.526 | -0.215 |
| =====                                    |                  |                     |          |        |        |        |        |
| Omnibus:                                 | 159.094          | Durbin-Watson:      | 1.898    |        |        |        |        |
| Prob(Omnibus):                           | 0.000            | Jarque-Bera (JB):   | 1750.015 |        |        |        |        |
| Skew:                                    | -2.197           | Prob(JB):           | 0.00     |        |        |        |        |
| Kurtosis:                                | 14.798           | Cond. No.           | 336.     |        |        |        |        |
| =====                                    |                  |                     |          |        |        |        |        |

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 2.2768604000174744  
LM P-Value: 0.8096593891195654  
F Statistic: 0.4489188462823637  
F P-Value: 0.8138980408051866

Regression Summary:

| OLS Regression Results                          |                  |                     |          |       |        |        |               |
|---|------------------|---------------------|----------|-------|--------|--------|---------------|
| =====   |                  |                     |          |       |        |        |               |
| Dep. Variable:                                  | Cumulative_diff  | R-squared:          | 0.058    |       |        |        |               |
| Model:  | OLS              | Adj. R-squared:     | 0.050    |       |        |        |               |
| Method:   | Least Squares    | F-statistic:        | 6.095    |       |        |        |               |
| Date:   | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00267  |       |        |        |               |
| Time:   | 12:14:23         | Log-Likelihood:     | -642.84  |       |        |        |               |
| No. Observations:                               | 216              | AIC:                | 1292.    |       |        |        |               |
| Df Residuals:                                   | 213              | BIC:                | 1302.    |       |        |        |               |
| Df Model:                                       | 2                |                     |          |       |        |        |               |
| Covariance Type:                                | HC3              |                     |          |       |        |        |               |
| =====   |                  |                     |          |       |        |        |               |
|   | coef             | std err             | z        | P> z  | [0.025 | 0.975] |               |
| -----   |                  |                     |          |       |        |        |               |
| const   | 4.0066           | 2.212               | 1.812    | 0.070 | -0.328 | 8.341  |               |
| Imports of goods and services (annual % growth) |                  |                     | 0.0518   | 0.033 | 1.588  | 0.112  | -0.012 0.116  |
| ln_GDP per capita (constant 2015 US\$)          |                  |                     | -0.7049  | 0.278 | -2.537 | 0.011  | -1.249 -0.160 |
| =====   |                  |                     |          |       |        |        |               |
| Omnibus:  | 68.205           | Durbin-Watson:      | 1.887    |       |        |        |               |
| Prob(Omnibus):                                  | 0.000            | Jarque-Bera (JB):   | 246.306  |       |        |        |               |
| Skew:   | -1.249           | Prob(JB):           | 3.28e-54 |       |        |        |               |
| Kurtosis:                                       | 7.596            | Cond. No.           | 114.     |       |        |        |               |
| =====   |                  |                     |          |       |        |        |               |

Notes:  
[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 25.769974144252586  
LM P-Value: 9.888468346023566e-05  
F Statistic: 5.689632376328185  
F P-Value: 6.053733361732683e-05

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:      Cumulative_diff  R-squared:          0.070
Model:              OLS  Adj. R-squared:      0.063
Method:             Least Squares  F-statistic:       3.852
Date:               Wed, 30 Aug 2023  Prob (F-statistic):   0.0224
Time:               12:14:24  Log-Likelihood:    -848.56
No. Observations:   266  AIC:                1703.
Df Residuals:       263  BIC:                1714.
Df Model:           2
Covariance Type:    HC3
=====
```

```
=====
              coef    std err          z      P>|z|     [0.025     0.975]
-----
const                8.7859    3.658    2.402    0.016    1.617    15.955
Inflation, consumer prices (annual %) -0.0751    0.062   -1.208    0.227   -0.197    0.047
ln_GDP per capita (constant 2015 US$) -1.1129    0.405   -2.750    0.006   -1.906   -0.320
=====
```

```
=====
Omnibus:             268.985  Durbin-Watson:           1.787
Prob(Omnibus):       0.000  Jarque-Bera (JB):      20773.769
Skew:                3.719  Prob(JB):           0.00
Kurtosis:            45.650  Cond. No.           118.
=====
```

### Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

## White Test Results:

LM Statistic: 21.350895857795383  
LM P-Value: 0.0006952631046959588  
F Statistic: 4.5381183327776204  
F P-Value: 0.0005520898144031615

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:      Cumulative_diff  R-squared:      0.121
Model:              OLS  Adj. R-squared:    0.107
Method:             Least Squares  F-statistic:    7.404
Date:               Wed, 30 Aug 2023  Prob (F-statistic): 0.000904
Time:               12:14:24  Log-Likelihood: -373.22
No. Observations:   132  AIC:              752.4
Df Residuals:       129  BIC:              761.1
Df Model:           2
Covariance Type:    HC3
=====
```

```
=====
              coef    std err          z      P>|z|      [0.025    0.975]
-----
const                9.2523     2.637     3.509     0.000     4.084    14.421
Interest payments (% of revenue)    0.0444     0.029     1.525     0.127    -0.013     0.101
ln_GDP per capita (constant 2015 US$) -1.3128     0.343    -3.824     0.000    -1.986    -0.640
=====
```

```
=====
Omnibus:             4.655  Durbin-Watson:      1.688
Prob(Omnibus):       0.098  Jarque-Bera (JB):      5.822
Skew:                -0.135  Prob(JB):           0.0544
Kurtosis:             3.993  Cond. No.           118.
=====
```

### Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

## White Test Results:

LM Statistic: 16.027292319785257  
LM P-Value: 0.006766583563972984  
F Statistic: 3.482610473942506  
F P-Value: 0.005548965207904749

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.041
Model:            OLS  Adj. R-squared:    0.007
Method:           Least Squares  F-statistic:      0.9063
Date:             Wed, 30 Aug 2023  Prob (F-statistic):    0.410
Time:             12:14:25  Log-Likelihood:   -171.81
No. Observations: 61  AIC:                349.6
Df Residuals:     58  BIC:                356.0
Df Model:          2
Covariance Type:  HC3
=====
```

```
=====
               coef  std err      z  P>|z|   [0.025   0.975]
-----
const                4.2839    3.554    1.206  0.228   -2.681    11.249
Net debt (% of GDP)   -0.0068    0.023   -0.293  0.770   -0.052    0.038
ln_GDP per capita (constant 2015 US$) -0.5998    0.464   -1.293  0.196   -1.509    0.309
=====
```

```
=====
Omnibus:            3.412  Durbin-Watson:        2.266
Prob(Omnibus):       0.182  Jarque-Bera (JB):        3.341
Skew:                -0.037  Prob(JB):              0.188
Kurtosis:            4.144  Cond. No.              596.
=====
```

#### Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

## White Test Results:

LM Statistic: 10.77518342687424  
LM P-Value: 0.05602420356628646  
F Statistic: 2.3599293294191526  
F P-Value: 0.051900524313378965

Regression Summary:

OLS Regression Results

=====

Dep. Variable: Cumulative\_diff R-squared: 0.064

Model: OLS Adj. R-squared: 0.055

Method: Least Squares F-statistic: 6.676

Date: Wed, 30 Aug 2023 Prob (F-statistic): 0.00157

Time: 12:14:25 Log-Likelihood: -568.05

No. Observations: 197 AIC: 1142.

Df Residuals: 194 BIC: 1152.

Df Model: 2

Covariance Type: nonrobust

=====

|  | coef    | std err | t      | P> t  | [0.025 | 0.975] |
|--|---------|---------|--------|-------|--------|--------|
| const  | 5.3245  | 2.119   | 2.512  | 0.013 | 1.144  | 9.505  |
| Net lending/borrowing (overall balance) (% of GDP) | 0.1506  | 0.069   | 2.177  | 0.031 | 0.014  | 0.287  |
| ln_GDP per capita (constant 2015 US\$)             | -0.7254 | 0.268   | -2.711 | 0.007 | -1.253 | -0.198 |

=====

Omnibus: 42.259 Durbin-Watson: 1.942

Prob(Omnibus): 0.000 Jarque-Bera (JB): 136.108

Skew: -0.832 Prob(JB): 2.78e-30

Kurtosis: 6.717 Cond. No. 59.0

=====

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 0.5461303948182431

LM P-Value: 0.990336672666985

F Statistic: 0.10619379055237961

F P-Value: 0.9908101744303275



Regression Summary:

| OLS Regression Results                      |                  |                     |         |       |         |         |  |
|---|------------------|---------------------|---------|-------|---------|---------|--|
| =====                                       |                  |                     |         |       |         |         |  |
| Dep. Variable:                              | Cumulative_diff  | R-squared:          | 0.979   |       |         |         |  |
| Model:                                      | OLS              | Adj. R-squared:     | 0.958   |       |         |         |  |
| Method:                                     | Least Squares    | F-statistic:        | 46.93   |       |         |         |  |
| Date:                                       | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.0209  |       |         |         |  |
| Time:                                       | 12:14:25         | Log-Likelihood:     | -8.2927 |       |         |         |  |
| No. Observations:                           | 5                | AIC:                | 22.59   |       |         |         |  |
| Df Residuals:                               | 2                | BIC:                | 21.41   |       |         |         |  |
| Df Model:                                   | 2                |                     |         |       |         |         |  |
| Covariance Type:                            | nonrobust        |                     |         |       |         |         |  |
| =====                                       |                  |                     |         |       |         |         |  |
|   | coef             | std err             | t       | P> t  | [0.025  | 0.975]  |  |
| -----                                       |                  |                     |         |       |         |         |  |
| const                                       | 114.5733         | 25.254              | 4.537   | 0.045 | 5.915   | 223.232 |  |
| ln_Net official aid received (current US\$) | -10.1899         | 1.170               | -8.710  | 0.013 | -15.224 | -5.156  |  |
| ln_GDP per capita (constant 2015 US\$)      | 8.7720           | 1.769               | 4.960   | 0.038 | 1.162   | 16.382  |  |
| =====                                       |                  |                     |         |       |         |         |  |
| Omnibus:                                    | nan              | Durbin-Watson:      | 1.088   |       |         |         |  |
| Prob(Omnibus):                              | nan              | Jarque-Bera (JB):   | 0.436   |       |         |         |  |
| Skew:                                       | 0.140            | Prob(JB):           | 0.804   |       |         |         |  |
| Kurtosis:                                   | 1.580            | Cond. No.           | 575.    |       |         |         |  |
| =====                                       |                  |                     |         |       |         |         |  |

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.0  
LM P-Value: 0.2872974951836458  
F Statistic: nan  
F P-Value: nan

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.049
Model:            OLS  Adj. R-squared:    0.042
Method:           Least Squares  F-statistic:      3.017
Date:            Wed, 30 Aug 2023  Prob (F-statistic):    0.0505
Time:            12:14:26  Log-Likelihood:    -943.91
No. Observations: 295  AIC:                1894.
Df Residuals:     292  BIC:                1905.
Df Model:          2
Covariance Type:  HC3
=====
```

```
=====
               coef  std err      z  P>|z|   [0.025   0.975]
-----
const                7.1402    3.384    2.110  0.035    0.507   13.774
Official Exchange Rate (annual %) -0.0713    0.055   -1.309  0.191   -0.178    0.035
ln_GDP per capita (constant 2015 US$) -0.9486    0.390   -2.434  0.015   -1.713   -0.185
=====
```

```
=====
Omnibus:            272.110  Durbin-Watson:        1.857
Prob(Omnibus):      0.000  Jarque-Bera (JB):    18454.548
Skew:               3.306  Prob(JB):            0.00
Kurtosis:           41.180  Cond. No.            94.5
=====
```

### Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

## White Test Results:

LM Statistic: 29.268653764156024  
LM P-Value: 2.0536578558757144e-05  
F Statistic: 6.3663102284770074  
F P-Value: 1.256965178406538e-05

Regression Summary:

| OLS Regression Results                                   |                  |                     |           |         |       |        |        |        |        |
|--|------------------|---------------------|-----------|---------|-------|--------|--------|--------|--------|
| =====  |                  |                     |           |         |       |        |        |        |        |
| Dep. Variable:   | Cumulative_diff  | R-squared:          | 0.033     |         |       |        |        |        |        |
| Model:   | OLS              | Adj. R-squared:     | 0.026     |         |       |        |        |        |        |
| Method:  | Least Squares    | F-statistic:        | 4.946     |         |       |        |        |        |        |
| Date:  | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00772   |         |       |        |        |        |        |
| Time:  | 12:14:26         | Log-Likelihood:     | -950.98   |         |       |        |        |        |        |
| No. Observations:  | 297              | AIC:                | 1908.     |         |       |        |        |        |        |
| Df Residuals:  | 294              | BIC:                | 1919.     |         |       |        |        |        |        |
| Df Model:  | 2                |                     |           |         |       |        |        |        |        |
| Covariance Type:   | nonrobust        |                     |           |         |       |        |        |        |        |
| =====  |                  |                     |           |         |       |        |        |        |        |
|  |                  | coef                | std err   | t       | P> t  | [0.025 | 0.975] |        |        |
| -----  |                  |                     |           |         |       |        |        |        |        |
| const  |                  | 4.7726              | 2.433     | 1.961   | 0.051 | -0.016 | 9.561  |        |        |
| ln_Official exchange rate (LCU per US\$, period average) |                  |                     |           | 0.1214  | 0.092 | 1.326  | 0.186  | -0.059 | 0.302  |
| ln_GDP per capita (constant 2015 US\$)                   |                  |                     |           | -0.7396 | 0.303 | -2.440 | 0.015  | -1.336 | -0.143 |
| =====  |                  |                     |           |         |       |        |        |        |        |
| Omnibus:   | 289.434          | Durbin-Watson:      | 2.006     |         |       |        |        |        |        |
| Prob(Omnibus):   | 0.000            | Jarque-Bera (JB):   | 23290.882 |         |       |        |        |        |        |
| Skew:  | 3.569            | Prob(JB):           | 0.00      |         |       |        |        |        |        |
| Kurtosis:  | 45.792           | Cond. No.           | 58.7      |         |       |        |        |        |        |
| =====  |                  |                     |           |         |       |        |        |        |        |

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.6320464856064563  
LM P-Value: 0.6035081683741398  
F Statistic: 0.7205460000999174  
F P-Value: 0.6084617058613542

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.022
Model:            OLS  Adj. R-squared:    0.015
Method:           Least Squares  F-statistic:      3.392
Date:            Wed, 30 Aug 2023  Prob (F-statistic):    0.0349
Time:            12:14:27  Log-Likelihood:   -1035.3
No. Observations: 311  AIC:                2077.
Df Residuals:     308  BIC:                2088.
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
               coef  std err      t  P>|t|   [0.025   0.975]
-----
const                5.7620    2.640    2.183  0.030    0.568   10.957
Oil price            -0.0032    0.010   -0.302  0.763   -0.024    0.017
ln_GDP per capita (constant 2015 US$) -0.8470    0.333   -2.544  0.011   -1.502   -0.192
=====
```

```
=====
Omnibus:            170.338  Durbin-Watson:        2.040
Prob(Omnibus):      0.000  Jarque-Bera (JB):    11979.713
Skew:               1.356  Prob(JB):             0.00
Kurtosis:           33.284  Cond. No.             572.
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 6.1963336623478575  
LM P-Value: 0.28758091896398014  
F Statistic: 1.2400649832883195  
F P-Value: 0.29019261396913304

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:    0.032
Model:           OLS  Adj. R-squared:  0.025
Method:          Least Squares  F-statistic:    2.988
Date:            Wed, 30 Aug 2023  Prob (F-statistic):  0.0518
Time:            12:14:27  Log-Likelihood:  -1033.7
No. Observations:  311  AIC:            2073.
Df Residuals:      308  BIC:            2085.
Df Model:           2
Covariance Type:   HC3
=====
```

|  | coef    | std err | z      | P> z  | [0.025 | 0.975] |
|--|---------|---------|--------|-------|--------|--------|
| const                                  | 5.1764  | 2.689   | 1.925  | 0.054 | -0.093 | 10.446 |
| Oil price (% change)                   | -2.9268 | 2.141   | -1.367 | 0.172 | -7.122 | 1.269  |
| ln_GDP per capita (constant 2015 US\$) | -0.7973 | 0.327   | -2.441 | 0.015 | -1.438 | -0.157 |

```
=====
Omnibus:          161.164  Durbin-Watson:    2.058
Prob(Omnibus):    0.000  Jarque-Bera (JB):  11081.334
Skew:             1.229  Prob(JB):          0.00
Kurtosis:         32.139  Cond. No.          53.8
=====
```

### Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

## White Test Results:

LM Statistic: 14.41149089265991  
LM P-Value: 0.01319639912689444  
F Statistic: 2.964042494761973  
F P-Value: 0.012508685041442452

Regression Summary:

| OLS Regression Results                                     |                  |                     |          |        |       |        |        |  |  |
|--|------------------|---------------------|----------|--------|-------|--------|--------|--|--|
| =====  |                  |                     |          |        |       |        |        |  |  |
| Dep. Variable:   | Cumulative_diff  | R-squared:          | 0.071    |        |       |        |        |  |  |
| Model:   | OLS              | Adj. R-squared:     | 0.061    |        |       |        |        |  |  |
| Method:  | Least Squares    | F-statistic:        | 7.136    |        |       |        |        |  |  |
| Date:  | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00103  |        |       |        |        |  |  |
| Time:  | 12:14:27         | Log-Likelihood:     | -547.47  |        |       |        |        |  |  |
| No. Observations:  | 190              | AIC:                | 1101.    |        |       |        |        |  |  |
| Df Residuals:  | 187              | BIC:                | 1111.    |        |       |        |        |  |  |
| Df Model:  | 2                |                     |          |        |       |        |        |  |  |
| Covariance Type:   | nonrobust        |                     |          |        |       |        |        |  |  |
| =====  |                  |                     |          |        |       |        |        |  |  |
|  |                  | coef                | std err  | t      | P> t  | [0.025 | 0.975] |  |  |
| -----  |                  |                     |          |        |       |        |        |  |  |
| const  |                  | 5.6141              | 2.125    | 2.642  | 0.009 | 1.422  | 9.806  |  |  |
| Primary net lending/borrowing (primary balance) (% of GDP) |                  | 0.1872              | 0.077    | 2.425  | 0.016 | 0.035  | 0.339  |  |  |
| ln_GDP per capita (constant 2015 US\$)                     |                  | -0.7989             | 0.267    | -2.994 | 0.003 | -1.325 | -0.273 |  |  |
| =====  |                  |                     |          |        |       |        |        |  |  |
| Omnibus:   | 42.536           | Durbin-Watson:      | 2.007    |        |       |        |        |  |  |
| Prob(Omnibus):   | 0.000            | Jarque-Bera (JB):   | 147.084  |        |       |        |        |  |  |
| Skew:  | -0.837           | Prob(JB):           | 1.15e-32 |        |       |        |        |  |  |
| Kurtosis:  | 6.972            | Cond. No.           | 54.7     |        |       |        |        |  |  |
| =====  |                  |                     |          |        |       |        |        |  |  |

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 0.3217702310442927  
LM P-Value: 0.9972134793898827  
F Statistic: 0.06242753592151057  
F P-Value: 0.9973633070627627

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.032
Model:            OLS  Adj. R-squared:    0.021
Method:           Least Squares  F-statistic:      2.999
Date:             Wed, 30 Aug 2023  Prob (F-statistic):    0.0523
Time:             12:14:28  Log-Likelihood:   -553.39
No. Observations: 186  AIC:              1113.
Df Residuals:     183  BIC:              1122.
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|   [0.025   0.975]
-----
const                4.5230    2.422    1.868    0.063   -0.255    9.301
Real interest rate (%)      0.0220    0.027    0.809    0.420   -0.032    0.076
ln_GDP per capita (constant 2015 US$) -0.7316    0.310   -2.361    0.019   -1.343   -0.120
=====
```

```
=====
Omnibus:            80.985  Durbin-Watson:        1.810
Prob(Omnibus):      0.000  Jarque-Bera (JB):    374.549
Skew:               -1.625  Prob(JB):           4.65e-82
Kurtosis:           9.146  Cond. No.           109.
=====
```

#### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 1.749309126473285  
LM P-Value: 0.8826300250032445  
F Statistic: 0.3417904608904047  
F P-Value: 0.8870035942612612

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.021

Model:

OLS

Adj. R-squared:

0.015

Method:

Least Squares

F-statistic:

3.347

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0365

Time:

12:14:29

Log-Likelihood:

-1035.3

No. Observations:

311

AIC:

2077.

Df Residuals:

308

BIC:

2088.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

-----

const

5.6617

2.777

2.039

0.042

0.198

11.125

Real interest rate USA (%)

-0.0098

0.179

-0.055

0.956

-0.362

0.343

ln\_GDP per capita (constant 2015 US\$)

-0.8584

0.332

-2.584

0.010

-1.512

-0.205

Omnibus:

171.941

Durbin-Watson:

2.037

Prob(Omnibus):

0.000

Jarque-Bera (JB):

12044.453

Skew:

1.381

Prob(JB):

0.00

Kurtosis:

33.362

Cond. No.

66.5

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.415787257333868  
LM P-Value: 0.4912292510161973  
F Statistic: 0.8785939115640597  
F P-Value: 0.4956860892086816



## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:    0.043
Model:           OLS  Adj. R-squared:    0.034
Method:          Least Squares  F-statistic:    4.497
Date:            Wed, 30 Aug 2023  Prob (F-statistic):    0.0123
Time:            12:14:29  Log-Likelihood:    -582.46
No. Observations:    201  AIC:    1171.
Df Residuals:        198  BIC:    1181.
Df Model:            2
Covariance Type:    nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|    [0.025    0.975]
-----
const                5.7058    2.173    2.626    0.009    1.421    9.991
Revenue (% of GDP)          0.0049    0.034    0.144    0.886   -0.062    0.071
ln_GDP per capita (constant 2015 US$) -0.8281    0.308   -2.688    0.008   -1.436   -0.221
=====
```

```
=====
Omnibus:            37.588  Durbin-Watson:    1.938
Prob(Omnibus):      0.000  Jarque-Bera (JB):    115.322
Skew:               -0.734  Prob(JB):    9.08e-26
Kurtosis:           6.408  Cond. No.    189.
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 1.660115652789107  
LM P-Value: 0.8938856974199636  
F Statistic: 0.32479456216600744  
F P-Value: 0.8976416242830186

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.005

Model:

OLS

Adj. R-squared:

-0.004

Method:

Least Squares

F-statistic:

0.5454

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.580

Time:

12:14:30

Log-Likelihood:

-717.22

No. Observations:

243

AIC:

1440.

Df Residuals:

240

BIC:

1451.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

-----

const

1.4696

2.360

0.623

0.534

-3.179

6.118

Short-term debt (% of total external debt)

-0.0098

0.026

-0.376

0.707

-0.061

0.042

ln\_GDP per capita (constant 2015 US\$)

-0.2631

0.326

-0.806

0.421

-0.906

0.380

=====

Omnibus:

94.311

Durbin-Watson:

1.984

Prob(Omnibus):

0.000

Jarque-Bera (JB):

456.372

Skew:

-1.489

Prob(JB):

7.95e-100

Kurtosis:

9.017

Cond. No.

141.

=====

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.320896129318266  
LM P-Value: 0.5041982711587585  
F Statistic: 0.8580997381348229  
F P-Value: 0.509994568436182

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.020
Model:            OLS  Adj. R-squared:    0.010
Method:          Least Squares  F-statistic:      2.067
Date:            Wed, 30 Aug 2023  Prob (F-statistic):    0.129
Time:            12:14:30  Log-Likelihood:   -601.85
No. Observations: 209  AIC:                1210.
Df Residuals:     206  BIC:                1220.
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|    [0.025    0.975]
-----
const                3.9093    2.376    1.646    0.101   -0.774    8.593
Short-term debt (% of total reserves)  0.0014    0.002    0.853    0.395   -0.002    0.005
ln_GDP per capita (constant 2015 US$) -0.5710    0.313   -1.826    0.069   -1.187    0.045
=====
```

```
=====
Omnibus:            64.912  Durbin-Watson:        2.038
Prob(Omnibus):      0.000  Jarque-Bera (JB):    290.970
Skew:               -1.134  Prob(JB):          6.56e-64
Kurtosis:           8.317  Cond. No.          1.59e+03
=====
```

#### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

[2] The condition number is large, 1.59e+03. This might indicate that there are strong multicollinearity or other numerical problems.

#### White Test Results:

LM Statistic: 4.62075812886037  
LM P-Value: 0.4638907466651958  
F Statistic: 0.9179150402662406  
F P-Value: 0.470329514757464

Regression Summary:

OLS Regression Results

=====

Dep. Variable:

Cumulative\_diff

R-squared:

0.007

Model:

OLS

Adj. R-squared:

-0.002

Method:

Least Squares

F-statistic:

0.8041

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.449

Time:

12:14:30

Log-Likelihood:

-650.16

No. Observations:

226

AIC:

1306.

Df Residuals:

223

BIC:

1317.

Df Model:

2

Covariance Type:

nonrobust

=====

|   | coef   | std err | t       | P> t  | [0.025 | 0.975] |        |       |
|---|--------|---------|---------|-------|--------|--------|--------|-------|
| -----   |        |         |         |       |        |        |        |       |
| const   | 2.3764 | 2.245   | 1.059   | 0.291 | -2.048 | 6.800  |        |       |
| Total debt service (% of exports of goods, services and primary income) |        |         | -0.0045 | 0.019 | -0.240 | 0.811  | -0.041 | 0.032 |
| ln_GDP per capita (constant 2015 US\$)                                  |        |         | -0.3694 | 0.297 | -1.243 | 0.215  | -0.955 | 0.216 |

=====

Omnibus:

79.712

Durbin-Watson:

1.881

Prob(Omnibus):

0.000

Jarque-Bera (JB):

423.537

Skew:

-1.273

Prob(JB):

1.07e-92

Kurtosis:

9.204

Cond. No.

188.

=====

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.607131293734834

LM P-Value: 0.4656788264513454

F Statistic: 0.9156292075210641

F P-Value: 0.4716415324047363

Regression Summary:

| OLS Regression Results                           |                  |                     |           |       |        |        |  |
|--|------------------|---------------------|-----------|-------|--------|--------|--|
| =====  |                  |                     |           |       |        |        |  |
| Dep. Variable:                                   | Cumulative_diff  | R-squared:          | 0.067     |       |        |        |  |
| Model:   | OLS              | Adj. R-squared:     | 0.060     |       |        |        |  |
| Method:  | Least Squares    | F-statistic:        | 5.062     |       |        |        |  |
| Date:  | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00695   |       |        |        |  |
| Time:  | 12:14:31         | Log-Likelihood:     | -862.89   |       |        |        |  |
| No. Observations:                                | 269              | AIC:                | 1732.     |       |        |        |  |
| Df Residuals:                                    | 266              | BIC:                | 1743.     |       |        |        |  |
| Df Model:  | 2                |                     |           |       |        |        |  |
| Covariance Type:                                 | HC3              |                     |           |       |        |        |  |
| =====  |                  |                     |           |       |        |        |  |
|  | coef             | std err             | z         | P> z  | [0.025 | 0.975] |  |
| -----  |                  |                     |           |       |        |        |  |
| const  | 15.1100          | 7.182               | 2.104     | 0.035 | 1.034  | 29.186 |  |
| ln_Total reserves (including gold, current US\$) | -0.3765          | 0.269               | -1.402    | 0.161 | -0.903 | 0.150  |  |
| ln_GDP per capita (constant 2015 US\$)           | -1.0069          | 0.317               | -3.180    | 0.001 | -1.627 | -0.386 |  |
| =====  |                  |                     |           |       |        |        |  |
| Omnibus:   | 261.276          | Durbin-Watson:      | 1.911     |       |        |        |  |
| Prob(Omnibus):                                   | 0.000            | Jarque-Bera (JB):   | 17922.481 |       |        |        |  |
| Skew:  | 3.525            | Prob(JB):           | 0.00      |       |        |        |  |
| Kurtosis:  | 42.362           | Cond. No.           | 225.      |       |        |        |  |
| =====  |                  |                     |           |       |        |        |  |

Notes:  
[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 27.829646071838066  
LM P-Value: 3.9298580259231684e-05  
F Statistic: 6.069731870173064  
F P-Value: 2.443891155099485e-05

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:        0.067
Model:            OLS  Adj. R-squared:    0.060
Method:           Least Squares  F-statistic:      8.669
Date:            Wed, 30 Aug 2023  Prob (F-statistic):    0.000232
Time:            12:14:31  Log-Likelihood:    -704.57
No. Observations: 243  AIC:                1415.
Df Residuals:     240  BIC:                1426.
Df Model:          2
Covariance Type:  nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|   [0.025   0.975]
-----
const                7.5281    2.013    3.740   0.000    3.563   11.493
Total reserves in months of imports -0.0546    0.093   -0.585   0.559   -0.238    0.129
ln_GDP per capita (constant 2015 US$) -1.0246    0.251   -4.085   0.000   -1.519   -0.530
=====
```

```
=====
Omnibus:            52.416  Durbin-Watson:        1.872
Prob(Omnibus):      0.000  Jarque-Bera (JB):    169.446
Skew:               -0.881  Prob(JB):            1.60e-37
Kurtosis:           6.692  Cond. No.            63.5
=====
```

#### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 4.087351867146994  
LM P-Value: 0.5369092701835907  
F Statistic: 0.81092600168675  
F P-Value: 0.54285751945825

## Regression Summary:

### OLS Regression Results

```
=====
Dep. Variable:    Cumulative_diff  R-squared:    0.025
Model:           OLS  Adj. R-squared:    0.018
Method:          Least Squares  F-statistic:    3.406
Date:            Wed, 30 Aug 2023  Prob (F-statistic):    0.0347
Time:            12:14:32  Log-Likelihood:    -846.70
No. Observations:    265  AIC:    1699.
Df Residuals:        262  BIC:    1710.
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
               coef  std err      t  P>|t|  [0.025  0.975]
-----
const                5.2566    2.554    2.058  0.041    0.228   10.286
Trade (% of GDP)      0.0046    0.010    0.449  0.654   -0.016    0.025
ln_GDP per capita (constant 2015 US$) -0.8894    0.345   -2.577  0.010   -1.569   -0.210
=====
```

```
=====
Omnibus:            159.253  Durbin-Watson:    1.898
Prob(Omnibus):      0.000  Jarque-Bera (JB):    1753.618
Skew:               -2.199  Prob(JB):    0.00
Kurtosis:           14.810  Cond. No.    583.
=====
```

### Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## White Test Results:

LM Statistic: 2.132236540064469  
LM P-Value: 0.8305615946651616  
F Statistic: 0.4201726804442247  
F P-Value: 0.8345087715775212

Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.041

Model:

OLS

Adj. R-squared:

0.032

Method:

Least Squares

F-statistic:

4.618

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0109

Time:

12:14:32

Log-Likelihood:

-693.69

No. Observations:

219

AIC:

1393.

Df Residuals:

216

BIC:

1404.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

4.3575

2.751

1.584

0.115

-1.065

9.781

Unemployment, total (% of total labor force) (modeled ILO estimate)

0.1878

0.075

2.512

0.013

0.040

0.335

ln\_GDP per capita (constant 2015 US\$)

-0.8894

0.368

-2.415

0.017

-1.615

-0.163

Omnibus:

151.638

Durbin-Watson:

1.918

Prob(Omnibus):

0.000

Jarque-Bera (JB):

1895.883

Skew:

-2.508

Prob(JB):

0.00

Kurtosis:

16.513

Cond. No.

81.1

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.858183441542149  
LM P-Value: 0.570009552537386  
F Statistic: 0.7639547589533179  
F P-Value: 0.576718223431771



Regression Summary:

OLS Regression Results

Dep. Variable:

Cumulative\_diff

R-squared:

0.018

Model:

OLS

Adj. R-squared:

0.003

Method:

Least Squares

F-statistic:

1.206

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.303

Time:

12:14:33

Log-Likelihood:

-409.48

No. Observations:

133

AIC:

825.0

Df Residuals:

130

BIC:

833.6

Df Model:

2

Covariance Type:

nonrobust

</

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.2062510241141746  
LM P-Value: 0.6682222835246958  
F Statistic: 0.6274475978625923  
F P-Value: 0.6791081132316339

Regression Summary:

| OLS Regression Results                   |                  |                     |          |       |        |        |  |
|--|------------------|---------------------|----------|-------|--------|--------|--|
| =====                                    |                  |                     |          |       |        |        |  |
| Dep. Variable:                           | Cumulative_diff  | R-squared:          | 0.008    |       |        |        |  |
| Model:                                   | OLS              | Adj. R-squared:     | -0.000   |       |        |        |  |
| Method:                                  | Least Squares    | F-statistic:        | 0.9467   |       |        |        |  |
| Date:                                    | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.390    |       |        |        |  |
| Time:                                    | 12:14:34         | Log-Likelihood:     | -665.64  |       |        |        |  |
| No. Observations:                        | 230              | AIC:                | 1337.    |       |        |        |  |
| Df Residuals:                            | 227              | BIC:                | 1348.    |       |        |        |  |
| Df Model:                                | 2                |                     |          |       |        |        |  |
| Covariance Type:                         | nonrobust        |                     |          |       |        |        |  |
| =====                                    |                  |                     |          |       |        |        |  |
|  | coef             | std err             | t        | P> t  | [0.025 | 0.975] |  |
| -----                                    |                  |                     |          |       |        |        |  |
| const                                    | 1.8704           | 2.248               | 0.832    | 0.406 | -2.559 | 6.300  |  |
| ln_Use of IMF credit (DOD, current US\$) | 0.0085           | 0.016               | 0.530    | 0.597 | -0.023 | 0.040  |  |
| ln_GDP per capita (constant 2015 US\$)   | -0.3420          | 0.294               | -1.162   | 0.247 | -0.922 | 0.238  |  |
| =====                                    |                  |                     |          |       |        |        |  |
| Omnibus:                                 | 84.277           | Durbin-Watson:      | 1.958    |       |        |        |  |
| Prob(Omnibus):                           | 0.000            | Jarque-Bera (JB):   | 439.017  |       |        |        |  |
| Skew:                                    | -1.346           | Prob(JB):           | 4.66e-96 |       |        |        |  |
| Kurtosis:                                | 9.210            | Cond. No.           | 182.     |       |        |        |  |
| =====                                    |                  |                     |          |       |        |        |  |

Notes:  
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.006420406737873  
LM P-Value: 0.5484919388734982  
F Statistic: 0.7942156345542826  
F P-Value: 0.554821623935341